

FLORIDA PLANT IMMIGRANTS

OCCASIONAL PAPER No. 7
FAIRCHILD TROPICAL
GARDEN

THE RIB-SEED PALMS IN FLORIDA
THE LADY PALMS

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COCONUT GROVE, FLORIDA
No. 7 • JANUARY 1, 1940

THE RIB-SEED PALMS IN FLORIDA

A FEW EXOTIC small palms with bright red little fruits and deeply ribbed seeds are more or less planted in southern Florida, but they are so similar to each other and the names of them are so confused that we may now try to understand them. They are seldom mentioned in common writings on palms, at least not under their proper names.

The picture on this page identifies the commonest one of the rib-seeds. It is seen frequently from Palm Beach southward about buildings, in yards, along driveways, and it should make a good tub subject for verandas in its juvenile state.

This tree I have called the Solitaire palm to distinguish it from the Cluster palms of which I am to speak presently. The Solitaire produces a single slender trunk to 15 or 20 feet tall when in full growth, marked with irregular leaf-scar rings. It has an open attractive spreading head of ten or a dozen leaves, below which are borne the branching clusters of many small white flowers (that soon fall and shine for a time on the grass) and later the half-inch long cartridge-shaped fruits of brilliant red or scarlet color. It

makes a handsome and clean addition to the home property.

This palm and its associates are tender to frost, but as they are usually grown near buildings or under the protection of large trees they are not often injured. They come readily from seeds and grow rapidly into comely subjects. They have good shape and color even when young. How far north they may stand in the open I do not know. If we can bring them more actively to the attention of observers we may soon accumulate many records of their distribution in Florida. I have not noted them in other parts of the United States, but they are frequently planted in the tropics.

A different and clump effect is produced by the Cluster palms, another class of rib-seeds, one of which is shown in the picture on the third page. This is a beautiful graceful object well supplied with

foliage to the ground, with several trunks coming from the same root. I have seen them when young in pots, making an attractive display. The picture on page 3 is made from a photograph I took in Trinidad, but I have seen practi-



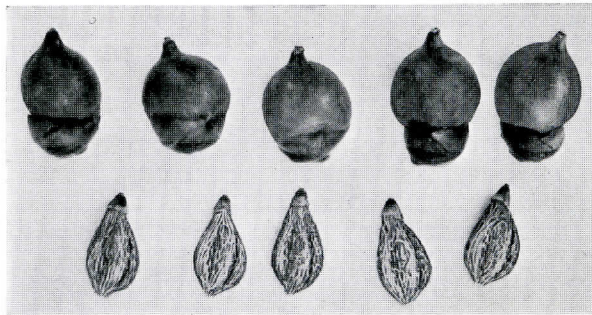
Solitaire palm, *Ptychosperma elegans*, at Fort Myers.

cally as good stands in southern Florida. Such clumps should stand quite by themselves, that they may develop the lower foliage and retain it. They should be excellent lawn subjects. Sometimes as many as twenty trunks arise from a single crown, and they may reach 20 feet or more

in height. The foliage usually has a bluish or shimmery cast in the sun. The fruit is indistinguishable externally from that of the Solitaire by the general observer, but differences are noted at once if one cuts across the seed.

These palms are native on the other side of the globe, the Solitaire in northeastern tropical Australia (the great York Peninsula in Queensland), and the Cluster in Papua or New Guinea. They have long been distributed around the world as planted subjects. In very recent years they have been subjects of technical botanical study and are now fairly well understood. We should therefore be able to speak of them by their correct names.

The small picture above shows the fruits in the upper row, and seeds or nutlets in the lower row. The pulp is thin and soft, and the



Fruits and seeds of Cluster palm, natural size. *Actinophloeus Macarthurii*.

seeds are easily washed out and cleaned. I do not know of other palm seeds like them in Florida plantings.

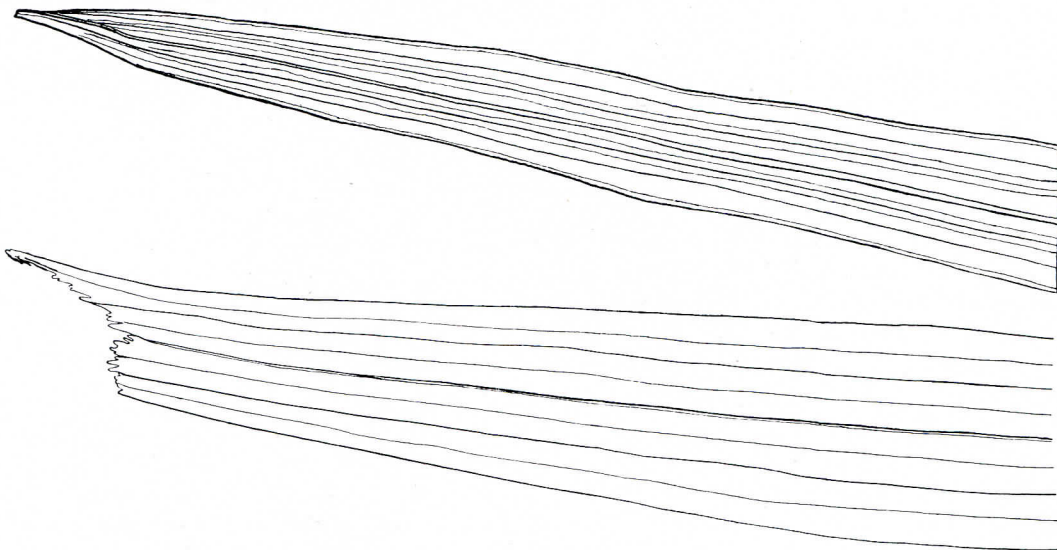
The names of the rib-seed palms

We come now into difficulties, but we should be able to resolve them; and thereafter we shall be look-

ing for the plants as we go and come in Florida and they will be discussed in meetings of garden folk. The Solitaire is of the genus *Ptychosperma* and the Clusters of the genus *Actinophloeus*. These items should be kept in mind. There are interesting histories behind the names, but we have space in this Paper for only the outlines.

Genus *Ptychosperma* (Greek, *folded seed*) was established by the Frenchman Labillardière in 1809. The name was established for a palm on the Pacific island New Ireland, northeast of New Guinea, for a time in more recent years called Neumecklenburg. The generic word is Greek and a neuter noun, and specific names should take the corresponding case ending.

Genus *Seaforthia* (for Lord Seaforth) was established by the Britisher Robert Brown in



Tip of pinna or leaflet of *Ptychosperma elegans* above, and of *Actinophloeus Macarthurii* below. One-half natural size.

1810 for a palm in Australia. The two genera are now considered to be the same and the older one must hold; thus, *Seaforthia* becomes a synonym of *Ptychosperma*.

About fifty years after Robert Brown published his *Seaforthia* the name was mistakenly applied in England to a very different palm under glass, to the one we now know as King palm or *Archontophoenix*, and the confusion persists until this our day in writings about palms. The King palms are also natives in Australia (and do well in Florida) but they are very different from the *Ptychospermas*. Under present botanical practice, the word *Seaforthia* is not applied to any palm; it is a discarded name.

Genus *Actinophloeus* (Greek combination apparently for *ray* and *bark*, but application not explained by its author) was founded by the Italian Beccari in 1885. We now know several species in the genus, from New Guinea and adjacent islands. Beccari meant to separate certain species from the older genus *Ptychosperma*, in which they were first named. The original species was *Actinophloeus Macarthurii*, which was previously called *Kentia* and *Ptychosperma Macarthurii*; the latter name is still current in lists. Main difference between *Actinophloeus* and *Ptychosperma* is in the seeds,—I said in a previous paragraph they are different. Seeds of *Actinophloeus* are seen to have a plain meat or albumen when cut across, all clear white, whereas those of *Ptychosperma* have a variegated interior because extensions of the side walls have run through it: the test is easily made by driving a knife-blade through the seed crosswise at its middle. It has recently been supposed that this internal difference is not

constant enough to warrant separation of the genera, under two names, but there are other good marks to distinguish them, as the clustered habit of *Actinophloeus*, and I prefer to consider them as separate at least for horticultural purposes.

Whether the common Cluster palm is called *Ptychosperma Macarthurii* or *Actinophloeus Macarthurii* or *Kentia Macarthurii*, the Macarthur Cluster palm is always one and the same species. It bears the name of Sir W. Macarthur of New



Good tree of *Actinophloeus Macarthurii*, commonest of the Cluster palms.

South Wales, who was instrumental in introducing it into that country from New Guinea. The palm began to bear his name in a more or less informal way as early as 1877 at an exhibition in Belgium and so continued for more than a third of a century before it was finally and properly botanically described (in 1926 by Radermacher for Java). Its long and continuous horticultural history testifies to its merit as a cultivated plant.

We are not yet finished with the perplexities in

the names of the rib-seed palms. The remainder of the confusion is due to mistaken identification of plants in cultivation. In the early days of their cultivation the Solitaire palm was called *Hydriastele Wendlandiana*, an error I find still persisting in many plantings in the tropics. The *Hydriasteles* (name pronounced as if written *Hydriastee-lee*) are palms of Australia and adjacent islands; I have not seen one of them in cultivation in the western hemisphere.

I have seen *Ptychosperma elegans* grown under the name *Balaka Seemannii*. This *Balaka* is a Fijian small palm. The name is in American lists but I have not known the true palm in cultivation. It is again a case of erroneous identification.

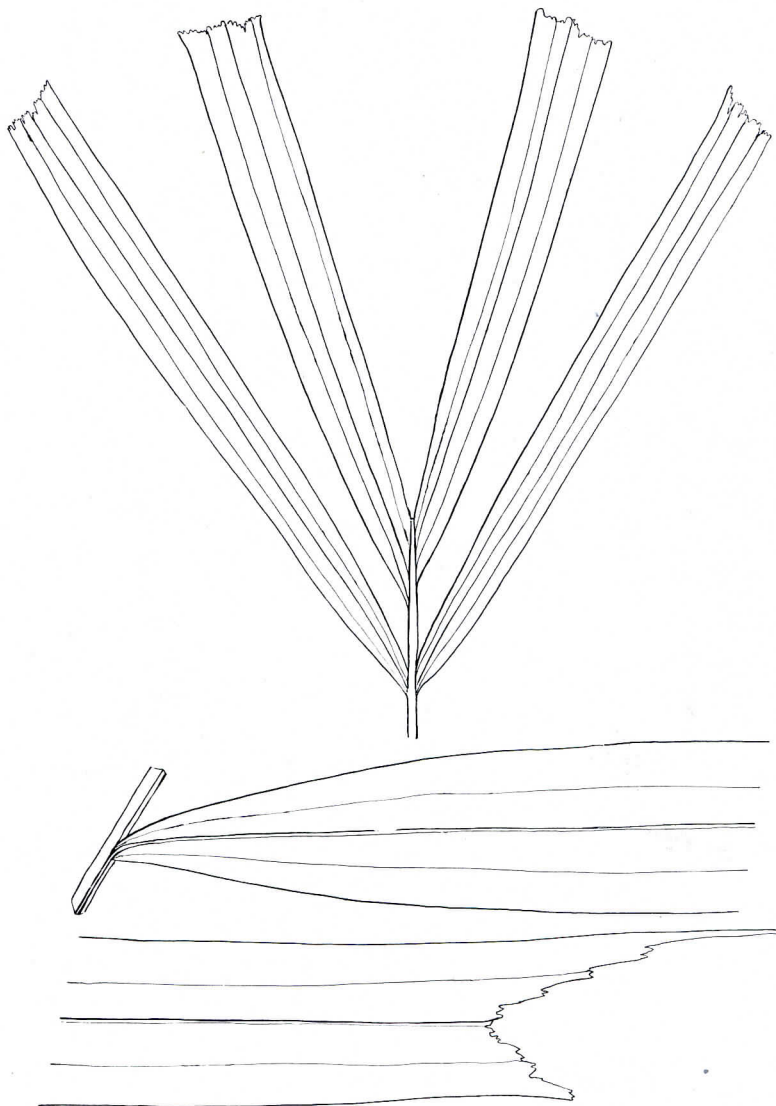
*The cultivated species of
rib-seed palms*

Three rib-seed palms I have seen in plantations in Florida; a fourth I have met in Havana and it may have been introduced into the United States.

The three are *Ptychosperma elegans*, the Solitaire palm; *Actinophloeus Macarthurii*, the common broad-leaved Cluster palm; *A. hospitus*, the narrow-leaved Cluster, also from New Guinea. The last, *A. hospitus*, has not been recognized in this country until very recently. There is a good plant of it at the entrance to David Fairchild's residence, the Kampong. The *A. hospitus* is probably only a variety of *A. Macarthurii* and I now proceed formally to make it so.* It differs from the usual species in commonly having less shining foliage, narrower side

* *Actinophloeus Macarthurii*, Becc.
var. *hospitus*, n. var.

Actinophloeus hospitus, Bur-
ret, in Notizblatt Bot.
Gart. u. Mus. Berlin-
Dahlem, xi, 206 (1931).
Ptychosperma hospitum, Bur-
ret, same, xii, 596 (1935).



One of the Cluster palms, *Actinophloeus Macarthurii* var. *hospitus*, at the Kampong, Coconut Grove; terminal part of leaf above. One-half natural size.

leaflets from about $1\frac{1}{2}$ inches to less than 1 inch broad rather than usually $2\frac{1}{2}$ to 4 inches wide as in *Macarthurii*; the transverse mottling commonly rather conspicuous on the leaflets of *Macarthurii* is less marked in var. *hospitus*. We do not yet know whether var. *hospitus* makes as large and robust tree as the other. Fruits and seeds are the same in both. This palm has come to me under the name *Actinophloeus angustifolius*.

The other *Actinophloeus* that I have not yet seen in Florida is like *A. Macarthurii* but the spathe is purple, and the foliage is bright reddish-purple underneath and brownish-purple on the

upper surface. This palm is *Actinophloeus Nicolai*. It is yet to be determined whether it is really a distinct species or only a color form of *A. Macarthurii*. Fruits of the two do not differ. It is growing and fruiting in one of the parks in Havana, and was long ago introduced as a greenhouse palm in the North but apparently lost.

This, then, is the account of the rib-seed palms for Florida. They are a good lot, and I recommend them to the attention of home planters, to add to the interest and variety of subtropical horticulture.

THE LADY PALMS

A class of small palms, seldom seen in flower in the open ground in the United States and perhaps not at all in fruit, should have greater attention from planters. They are *Rhapis*, the Lady palms. The picture on this page identifies one of them.

The reason for their not fruiting is the fact that the staminate and pistillate (male and female) flowers are produced on different plants, and the grower may not have both sexes in his plantations. There is no way of telling one from the other until they come into bloom; and even then the flowers are so inconspicuous that one may not notice them.

Fortunately, it is not necessary to have both sexes because the plants propagate naturally by offshoots or suckers and undoubtedly have perpetuated themselves in this way for centuries. There are only two species known to be in cultivation in this country, yet variations in them are so marked that even botanists have difficulty in referring them to their correct names; this probably means that marked differences have arisen by means of asexual variation, whereas we suppose this to be an unusual circumstance in the vegetable world.

These plants are fan palms, but the leaf segments or parts are so narrow and separated so far down to the base of the blade that one hardly associates them with pal-

mettoes and *Thrinax* and other palmate-leaved species.

Nine species of *Rhapis* are known, all native presumably in China. The common one in cultivation is *Rhapis excelsa*, better but incorrectly known as *R. flabelliformis*; the more slender one is *R. humilis*. Native places in China of the seven species not introduced to gardens are recorded, yet the original regions of *R. excelsa* and *R. humilis* are not known. Probably these two have been in cultivation for centuries in the Far East and have passed from hand to hand until more



Good stand of Lady palm, *Rhapis excelsa*

than one hundred years ago they began to be grown in western Europe. How early they were introduced in the Americas cannot be stated. Although the exact native regions of *R. excelsa* and *R. humilis* have not been determined, we are convinced they were originally Chinese; not all of China and adjoining countries are yet completely explored for plants.

Although these palms are widespread in cultivation, they apparently receive little attention, and scant space is given them in books and discussions. Perhaps one reason for this neglect is the fact that they have no generally accepted common name, and are therefore not ready subjects of conversation. To remedy this lack, some months ago I published them as the Lady palms, an English name that should suit them well.

The Lady palms are hardier than most other plants of this family. They are dry-land subjects. I see them here and there in many parts of Florida, in southern California, and frequently in conservatories and as decorations in halls and living rooms. When one offshoot is planted, it soon begins to sucker and it will fill the big pot or tub and ask for more room. When there is root space the plant makes a large clump, several feet across, like a stand of bamboo. Young suckers may be detached for new plantings. When crowded or in a dark place the reed-like stems are likely to stand out bare and perhaps unattractive; yet the stems or trunks themselves are interesting from the sheaths of brown fibers that encase them.

The larger Lady palm, *Rhapis excelsa*, may grow eventually to 15 to 20 feet tall, and the trunks become 2 inches thick. The roots are dense and numerous and hold the clump together tenaciously. It has segments or leaflets more than 2 inches broad at the middle on the main well grown leaves. The segments are five to ten or more. The leaf is shining green, making a bright appearance in a sunny place. Petioles are as long

as the leaf-blade and sometimes twice exceeding it. Apex of the main segments are broad or blunt and bear coarse separate teeth. Surface is conspicuously cross-nerved. Trunk fibers are coarse and loose.

The slender Lady palm, *Rhapis humilis*, has the trunk seldom an inch thick with sheaths tightly woven and cloth-like, petioles shorter than the blades, ends of main segments narrowed almost to a point and the teeth not conspicuously separated, leaf itself dull deep green. This plant is apparently much less common than *R. excelsa*. Its fruit is unknown; in fact, of the other species I have seen ripe fruit only once and then from a tree in the far tropics.

The best plantings I have seen of the Lady palms are in places where they are allowed to take their course until they develop dense almost impenetrable more or less circular clumps 10 feet and more across. They are spineless, and therefore not a menace to the property, and they require very little attention. I have seen them making long low thick borders by walks and roadways; for these purposes the dwarf and bushy races should be chosen. Such borders may maintain themselves only 3 or 4 feet high.

The picture on page 7 is from a photograph I took in Venezuela. It shows a rather tall attractive bushy specimen. Such a plant becomes a permanent object in the yard or park; it sets itself off effectively against a background of heavy planting of trees.

Commonly a stand of Lady palm maintains itself for years at about head height, then one or more of the stocks may send up a conspicuous trunk. These trunks may be removed, if objectionable. Trunks of *R. humilis* may grow as tall as the other but they are more slender.

Perhaps this sketch of the Lady palms will induce a planter here and there to recognize them by name and to develop a group of them by forethought.